

PRIMACOR™ 1410

Copolymer

Introduction

PRIMACOR™ 1410 Copolymer is an ethylene acrylic acid copolymer suitable for monolayer or coextrusion blown films. PRIMACOR™ 1410 Copolymer has been specifically designed for use as a heat seal or adhesive layer in composite films.

PRIMACOR™ 1410 Copolymer exhibits:

- Excellent hot tack and sealability
- Excellent toughness and strength
- Excellent crack resistance
- Insensitivity to moisture
- Good optical properties

Applications:

- Specialty and skin packaging
- Multilayer films

Complies with:

- US. FDA 21 CFR 177.1310(a)(1)
- EU. No 10/2011

Additives:

- Antiblock: No
- Slip: No

Properties

	Nominal Value (English)	Nominal Value (SI)	Test Method
Resin Properties	Density	0.938 g/cm ³	0.938 g/cm ³ ASTM D792 ISO 1183
	Melt Index (2.16 kg @190°C)	1.5 g/10min	1.5 g/10min ASTM D1238 ISO 1133
	Comonomer Contents ¹	9.7 %	9.7 % SK Method
	Vicat Softening Temperature	178 °F	81.1 °C ASTM D1525 ISO 306
	Melting Temperature (DSC)	208 °F	97.8 °C SK Method
Film Properties	Film Thickness	2.0 mil	50.8 µm ASTM D374
	Dart Impact Strength	580 g	580 g ASTM D1709B ISO 7765-1/B
	Haze	5.8 %	5.8 % ASTM D1003 ISO 14782
	Gloss (45°)	65	65 ASTM D2457



		Nominal Value (English)	Nominal Value (SI)	Test Method
Film Properties	Elmendorf Tear Strength	MD 380 g	380 g	ASTM D1922
		TD 510 g	510 g	ISO 6383-2
	Tensile Strength at Yield	MD 1710 psi	11.8 MPa	ASTM D882
		TD 1590 psi	10.9 MPa	ISO 527-3
	Tensile Strength at Break	MD 5500 psi	37.9 MPa	ASTM D882
		TD 5530 psi	38.1 MPa	ISO 527-3
	Tensile Elongation at Break	MD 400 %	400 %	ASTM D882
		TD 470 %	470 %	ISO 527-3

Extrusion

Condition²

- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D; Single Flight with Maddock Mixer
- Die Gap: 40 mil (1.0 mm)
- Die Diameter: 6 in. (152.4 mm)
- Melt Temperature: 385 °F (196 °C)
- Output: 6 lb/hr/in. of Die Circumference (1.07 kg/hr/cm of Die Circumference)
- Blow-up Ratio: 2.5:1
- Frost Line Height: 29 in. (737 mm)

¹ Comonomer content measured by a SK proprietary method that has equivalent accuracy as compared to ASTM D 4094.

² Equipment used to process this resin should be constructed of corrosion resistant materials. Dies and adapters are recommended to be stainless steels and/or duplex chrome or nickel plated.

Notes

These are *typical values* and are *not be construed as specifications*. The physical properties are highly dependent on the manufacturing conditions. So customers should confirm performances by their own tests.

